

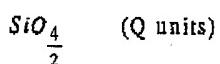
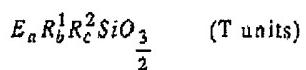
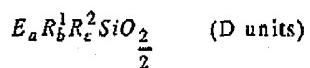
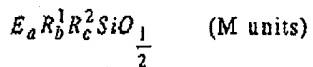
S/N: 10/068,117
 Reply to Office Action of June 20, 2003

Atty Dkt No. WSIL 0160 PUS

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A high weather and chemical resistant, addition-crosslinkable, epoxy-functional organopolysiloxane resin which contains at least one or more of the repeating units having the formulae:



wherein E is an epoxy-functional C₁₋₁₈ hydrocarbon group containing one or more oxygen atoms, provided that no oxygen atom is directly bonded to a Si- atom; and

R¹ and R² are independently a C₁₋₂₀ hydrocarbon, optionally interspersed with a heteroatom linking group;

a is an integer of 0, 1, or 2;

b is an integer of 0, 1, 2 or 3;

c is an integer of 0, 1, 2 or 3; and

in M units, a+b+c=3,

S/N: 10/068,117

Reply to Office Action of June 20, 2003

Atty Dkt No. WSIL 0160 PUS

in D units, $a+b+c=2$,in T units, $a+b+c=1$,wherein the M units are present in less than about 40 mole percent;the D units are present in an amount of [[up to]] about [[40]] 30 mole percent;
[[and]]the T units are present in an amount of about 70 mole percent;the molecule, on average, contains at least two E components; andwherein the hydrocarbon group of E comprises a C₃₋₁₂ hydrocarbon group, the
epoxy-functional organopolysiloxane resin has an epoxy equivalent weight in the range of
about 200-600, the epoxy functional organopolysiloxane resin has a viscosity in the range of
about 200-70,000 cps at 25°C, and the E is glycidoxypipropyl

2. (Cancelled)

3. (Original) The resin of claim 1 wherein the epoxy-functional organopolysiloxane resin has an alkoxy content of less than about 20 weight percent, based on the weight of the epoxy-functional organopolysiloxane resin.

4. (Original) The resin of claim 1 wherein the epoxy-functional organopolysiloxane resin has an epoxy equivalent weight in the range of about 150-1000.

5-7. (Cancelled)

8. (Currently Amended) The resin of claim [[6]] 1 wherein the epoxy-functional organopolysiloxane resin comprises T units and the T units include structures selected from the group consisting of silsequioxane and polysilsesquioxane structures.

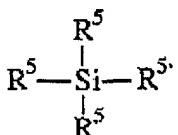
S/N: 10/068,117
Reply to Office Action of June 20, 2003

Atty Dkt No. WSIL 0160 PUS

9. (Original) The resin of claim 1 wherein the resin has a molecular weight between about 750 and 25,000.

10. (Original) The resin of claim 1 wherein the epoxy-functional organopolysiloxane resin is prepared by reacting a silicone resin with a silane having at least one epoxy group per molecule.

11. (Original) The resin of claim 10 wherein the silane is represented by the formula:



wherein each R^5 is individually selected from the group consisting of alkyl (C_{1-12}), aryl (C_{6-9}), vinyl, glycol, alkoxy (C_{1-12}), and an epoxy functional C_{1-18} hydrocarbon group of the formula $R^6 - E^1$ wherein E^1 comprises an epoxy group and R^6 comprises a C_{1-18} hydrocarbon group optionally interspersed with at least one heteroatom linking group, with the proviso that at least one R^5 comprises $R^6 - E^1$.

12. (Original) The resin of claim 11 wherein the heteroatom linking group, if present, is not adjacent to the E^1 group.

13. (Original) The resin of claim 11 wherein the hydrocarbon group of the R^6 comprises a C_{3-12} hydrocarbon group.

14. (Original) The resin of claim 11 wherein the silane has a molecular weight in the range of about 100 to about 750.

15. (Original) The resin of claim 14 wherein the silane has an epoxy-functionality in the range of about 1 to about 4.

S/N: 10/068,117
Reply to Office Action of June 20, 2003

Atty Dkt No. WSIL 0160 PUS

16. (Original) The resin of claim 15 wherein the silane has an alkoxy functionality in the range of about 1 to about 4.

17. (Cancelled)

18. (Currently Amended) The resin of claim 11 wherein the silane is a γ -glycidoxypropylsilane having C_{1-12} alkoxygroups.

19. (Original) The resin of claim 10 wherein the silicone has a molecular weight in the range of about 300 to about 15000.

20. (Cancelled)

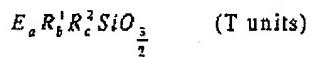
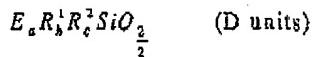
21. (Original) The resin of claim 1 wherein the resin is a liquid and has a molecular weight of about 500-5,000.

22. (Original) The resin of claim 21 wherein the resin has a molecular weight of about 1,200.

23. (Original) The resin of claim 22 wherein the molecule contains at least three E components.

24-25. (Cancelled)

26. (Currently Amended) A high weather and chemical resistant, addition-crosslinkable, epoxy-functional organopolysiloxane resin which contains at least one or more of the repeating units having the formulae:



S/N: 10/068,117
Reply to Office Action of June 20, 2003

Atty Dkt No. WSIL 0160 PUS

wherein E is an epoxy-functional C₁₋₁₈ hydrocarbon group containing one or more oxygen atoms, provided that no oxygen atom is directly bonded to a Si- atom; and

R¹ and R² are independently a C₁₋₂₀ hydrocarbon, optionally interspersed with a heteroatom linking group;

a is an integer of 0, 1, or 2;

b is an integer of 0, 1, 2 or 3;

c is an integer of 0, 1, 2 or 3; and

in D units, a+b+c=2,

in T units, a+b+c=1,

wherein the D units are present in about 30 mole percent;
the T units are present in about 70 mole percent; [[and]]
the molecule, on average, contains at least two E components; and
wherein the epoxy-functional organopolysiloxane resin has an epoxy equivalent weight in the range of about 200-600, the epoxy-functional organopolysiloxane resin has a viscosity in the range of about 200-70,000 cps at 25°C, and the E is glycidoxypipropyl



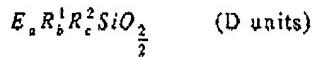
27-29. (Cancelled)

30. (Previously Presented) An epoxy-functional organopolysiloxane coating composition comprising:

a hardener;

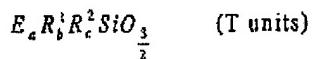
an acrylic resin; and

an epoxy-functional organopolysiloxane resin which contains at least one or more of the repeating units having the formulae:



S/N: 10/068,117
Reply to Office Action of June 20, 2003

Atty Dkt No. WSIL 0160 PUS



wherein E is an epoxy-functional C₁₋₁₈ hydrocarbon group containing one or more oxygen atoms, provided that no oxygen atom is directly bonded to a Si- atom; and R¹ and R² are independently a C₁₋₂₀ hydrocarbon, optionally interspersed with a heteroatom linking group; a is an integer of 0, 1, or 2; b is an integer of 0, 1, 2 or 3; c is an integer of 0, 1, 2 or 3; and in D units, a+b+c=2, in T units, a+b+c=1,

wherein the D units are present in about 30 mole percent; the T units are present in about 70 mole percent; and the molecule, on average, contains at least two E components.

31. (Previously Presented) The composition of claim 30 wherein the epoxy-functional organopolysiloxane resin has an epoxy equivalent weight in the range of about 200-600.

32. (Previously Presented) The composition of claim 31 wherein the epoxy-functional organopolysiloxane resin has a viscosity in the range of about 200-70,000 cps at 25°C.

S/N: 10/068,117
Reply to Office Action of June 20, 2003

Atty Dkt No. WSIL 0160 PUS

33. (Previously Presented) The composition of claim 32 wherein the E is glycidoxypropyl

